

WHAT IS CLAIMED IS:

1. A method of purging a wafer receiving jig provided with a holding part that has an opening to receive and hold a semiconductor wafer therein and an opening/closing door that is
5 provided at the opening,

wherein the opening/closing door is separated a predetermined distance from the opening to form a gap between the opening and the opening/closing door, and wherein purge gas is introduced into the holding part from the gap between the
10 opening and the opening/closing door to discharge atmosphere in the holding part through a second passage other than a first passage through which the purge gas is introduced to the outside of the holding part.

15 2. The method of purging a wafer receiving jig as claimed in claim 1, wherein the purge gas is introduced from both of left and right sides of the opening shaped like a rectangle into the holding part to discharge the atmosphere in the holding part through both of upper and lower sides of the opening.

20 3. The method of purging a wafer receiving jig as claimed in claim 1, wherein the purge gas is introduced from one side of the left and right sides of the opening shaped like a rectangle into the holding part to discharge the atmosphere in the
25 holding part through at least other side of the left and right sides of the opening.

4. The method of purging a wafer receiving jig as claimed in

claim 1, wherein the purge gas is introduced from upper and lower sides and left and right sides of the opening shaped like a rectangle into the holding part to discharge the atmosphere in the holding part through a central portion of the opening.

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5. The method of purging a wafer receiving jig as claimed in claim 1, wherein the purge gas is introduced from an upper side of the opening shaped like a rectangle into the holding part to discharge the atmosphere in the holding part through at least a lower side of the opening.

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6. A wafer transfer device comprising:

a box for partitioning a mini environment of a semiconductor manufacturing device;

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a base that is provided adjacently to the box and has a wafer receiving case placed thereon, the case being provided with a holding part having an opening to receive and hold a semiconductor wafer therein and a opening/closing door provided at the opening;

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a FIMS opening that is formed at a portion corresponding to the wafer receiving case of the box;

a FIMS door that is in close contact with the FIMS opening and prevents outside air from entering the mini environment;

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a cover that is provided on the base side of the box and surrounds the opening side of the holding part via a gap together with the base; and

purge gas introduction means that is provided at the opening and introduces purge gas at least from one direction of the periphery of the opening.

5 7. The wafer transfer device as claimed in claim 6, wherein the purge gas introduction means is a pipe provided with a plurality of introduction nozzles and is provided along the opening of the wafer receiving case.

10 8. The wafer transfer device as claimed in claim 6, wherein the purge gas introduction means is a pipe provided with a cutout slot formed along the opening.

9. The wafer transfer device as claimed in claim 6, wherein
15 the base has at least three positions where the receiving case is placed, the three positions being a loading/unloading position that is farthest from the box, a docking position where the opening/closing door is fixed to the FIMS door, and a purge position that is located in the middle of the
20 loading/unloading position and the docking position.

10. A method of manufacturing a semiconductor device in which a semiconductor wafer is stored and transferred by the use of a wafer receiving jig that has a holding part having an opening
25 to receive and hold a semiconductor wafer therein and an opening/closing door provided at the opening,

wherein the door opening/closing door is separated a

predetermined distance from the opening to form a gap between the opening and the opening/closing door and wherein purge gas is introduced into the holding part from the gap between the opening and the opening/closing door to discharge atmosphere in the holding part through a second passage other than a first passage through which the purge gas is introduced to the outside of the holding part.

11. The method of manufacturing a semiconductor device as claimed in claim 10, wherein the purge gas is introduced from both of left and right sides of the opening shaped like a rectangle into the holding part to discharge the atmosphere in the holding part through both of upper and lower sides of the opening to replace the atmosphere in the holding part with the purge gas.

12. The method of manufacturing a semiconductor device as claimed in claim 10, wherein the purge gas is introduced from one side of the left and right sides of the opening shaped like a rectangle into the holding part to discharge the atmosphere in the holding part through at least other side of the left and right sides of the opening to replace the atmosphere in the holding part with the purge gas.

13. The method of manufacturing a semiconductor device as claimed in claim 10, wherein the purge gas is introduced from upper and lower sides and left and right sides of the opening

shaped like a rectangle into the holding part to discharge the atmosphere in the holding part through a central portion of the opening to replace the atmosphere in the holding part with the purge gas.

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14. The method of manufacturing a semiconductor device as claimed in claim 10, wherein the purge gas is introduced from an upper side of the opening shaped like a rectangle into the holding part to discharge the atmosphere in the holding part
10 through at least a lower side of the opening to replace the atmosphere in the holding part with the purge gas.